

Fundamental Operations (Algebra)

Chapter 19: Fundamental Operations (Algebra) · Topic 1

Key Concept

We can add or subtract like terms (terms with the same variable), like $3x + 2x = 5x$, but not unlike terms like $3x + 2y$.

Multiplying algebraic terms involves multiplying the numbers and combining the variables, like $2x \times 3 = 6x$.

Dividing algebraic expressions follows similar rules, like $6x \div 2 = 3x$, dividing the numerical part.

Practising these operations helps us simplify expressions and solve algebraic problems more efficiently.

Quick Revision Notes

- We add/subtract like terms with the same variable.
- $3x + 2x = 5x$ is an example.
- We cannot combine unlike terms, like $3x + 2y$.
- Multiplying: $2x \times 3 = 6x$.
- Dividing: $6x \div 2 = 3x$.
- These operations simplify expressions.
- Practice builds algebra problem-solving skills.
- Rules are similar to number operations.

Practice Questions

- 1 Simplify $5x + 3x$.
- 2 Simplify $7y - 2y$.
- 3 Multiply $3x$ by 4.
- 4 Divide $8x$ by 4.
- 5 Explain why we can't add $2x$ and $3y$ directly.
- 6 Solve two algebraic simplification problems.